ATTACHMENT J1

BANGOR IAP (ANG) Electric Distribution System

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J1 BANGOR IAP (ANG) Electric Distribution System

J1.1 BANGOR IAP (ANG) Overview

Bangor IAP is located inside the city limits of Bangor, Maine. It is the home of the 101st Air Refueling Wing whose mission is to provide air refueling, airlift and mobility missions. Bangor is approximately 130 miles north of Portland, Maine, which is the largest city in the state of Maine. The base is 260 acres in size, of which 157.97 is leased land and 102.03 is fee-owned land. There are a total of 43 facilities on base, 32 industrial, 6 administrative and 5 services with no family housing. Current base population is approximately 450 personnel during non-drill duty days and increases to approximately 1100 personnel on a drill duty weekend that occur once per month.

J1.2 Electric Distribution System Description

J1.2.1 Electric Distribution System Fixed Equipment Inventory

The BANGOR IAP (ANG) electric distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, defined by the Right of Way. The system may include, but is not limited to, transformers, circuits, protective devices, utility poles, ductbanks, switches, and other ancillary fixed equipment. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the electric distribution system privatization are:

1. Street lighting
2. Parking lot area lighting
3. Airfield lighting
4. Emergency backup generators

J1.2.1.1 Description

The Bangor IAP Electrical Distribution System is Y configured and distributed at 12kv. System has approximately 14,400LF of overhead line and approximately 4,000LF running underground in PVC conduit encased in cement. All wiring was installed between 1955 and 2000. Forty-seven per cent of wiring is only 3 years old. There are 118 wooden 40-foot utility poles. There are 17 pole mounted transformers that range from 25 to 75 kva installed from 1980 to 1990 and 25 oil filled pad mounted

transformers with a range of 150 to 750 kva installed between 1983 and 1987. There are 12 pre-cast concrete electrical manholes 7 ft deep, with 30-inch diameter manhole covers. System also contains 40 switches rated at 13kv located throughout the distribution system.

Bangor IAP (ANG) has no power generation capabilities except for emergency backup generators that fall outside the scope of this utility privatization effort.

J1.2.1.2 Inventory

Table 1 provides a general listing of the major electric distribution system fixed assets for the BANGOR IAP (ANG) electric distribution system included in the sale.

TABLE 1
Fixed Inventory
Electric Distribution System BANGOR IAP (ANG)

Item	Size	Quantity	Unit	Approximate Year of Construction
Underground Circuits	AWG	Length		
3ph, 4w, 15000V, in conduit	#2	140	LF	1987
3ph, 4w, 15000V, in conduit	#6	90	LF	1978
3ph, 4w, 15000V, in conduit	#1/0	15	LF	1995
3ph, 4w, 15000V, in conduit	#1/0	195	LF	1986
3ph, 4w, 15000V, in conduit	#2/0	135	LF	1989
3ph, 4w, 15000V, in conduit	#2/0	696	LF	1987
3ph, 4w, 15000V, in conduit	#2/0	630	LF	1986
3ph, 4w, 15000V, in conduit	#4/0	405	LF	1999
3ph, 4w, 15000V, in conduit	#4/0	235	LF	1997
3ph, 4w, 15000V, in conduit	#4/0	40	LF	1993
3ph, 4w, 15000V, in conduit	#4/0	565	LF	1987
3ph, 4w, 15000V, in conduit	#4/0	220	LF	1986
3ph, 4w, 15000V, in conduit	#4/0	510	LF	1985
3ph, 4w, 15000V, in conduit	#4/0	85	LF	1955
Overhead Circuits	AWG	Length		
3 ph, 4 w, conductor	#2 CU	280	LF	2000
3 ph, 4 w, conductor	#2 CU	2,685	LF	1999
3 ph, 4 w, conductor	#2 CU	4,970	LF	1997
3 ph, 4 w, conductor	#2 CU	186	LF	1996
3 ph, 4 w, conductor	#2 CU	3,340	LF	1987

Item	Size	Quantity	Unit	Approximate Year of Construction
3 ph, 4 w, conductor	#2 CU	2,120	LF	1986
3 ph, 4 w, conductor	#2 CU	800	LF	1955
Transformers	Nom kVA	No.		
3 Phase Dry Type, ventilated (pole)	25	10	EA	1990
3 Phase Dry Type, ventilated (pole)	75	7	EA	1980
3 Phase Oil filled, pad mounted	150	5	EA	1987
3 Phase Oil filled, pad mounted	225	4	EA	1987
3 Phase Oil filled, pad mounted	300	3	EA	1985
3 Phase Oil filled, pad mounted	500	10	EA	1987
3 Phase Oil filled, pad mounted	750	3	EA	1983
Utility Poles	Height (ft)	No.		
Wood	40	2	EA	1998
Wood	40	1	EA	1989
Wood	40	113	EA	1987
Wood	40	1	EA	1986
Wood	40	1	EA	1980
Switches	Type	No.		
Overhead Line	13KV	40	EA	1987
Manholes				
Pre-cast concrete				
(All manhole covers are 30 inch dia)	4'X6'7'	4	EA	1980
	6'X8'X7'	4	EA	1980
	4'X10'X7'	4	EA	1980

Notes:

AWG = American Wire Gauge
ea = each
LF = linear feet
Nom kVA = nominal kilovolt-amperes
ph – phase
V = volts
w = wire

J1.2.2 Electric Distribution System Non-Fixed Equipment and Specialized Tools

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 2
Spare Parts
Electric Distribution System BANGOR IAP (ANG)

Qty	Item	Make/Model	Description	Remarks
None				

TABLE 3
Specialized Vehicles and Tools
Electric Distribution System BANGOR IAP (ANG)

Description	Quantity	Location	Maker
None			

J1.2.3 Electric Distribution System Manuals, Drawings, and Records

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
Manuals, Drawings, and Records
Electric Distribution System BANGOR IAP (ANG)

Qty	Item	Description	Remarks
1		AutoCAD file/Electrical Utility Map	Release Ver. 2000

J1.3 Specific Service Requirements

The service requirements for the BANGOR IAP (ANG) electric distribution system are as defined in the Section C, *Description/Specifications/Work Statement.*

J1.4 Current Service Arrangement

- Provider Name: Bangor Hydro Electric
- Average Monthly Usage: 419,650 kWH

- Annual Usage Fluctuations: High (monthly): 595,555 kWH; Low (monthly): 289,477 kWH
- Special Considerations: The base is looking into using their existing generators to reduce peak electrical demand.

J1.5 Secondary Meters

J1.5.1 Existing Secondary Meters

Table 5 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3 and J1.6 below.

TABLE 5
Existing Secondary Meters
Electric Distribution System BANGOR IAP (ANG)

Meter Location	Meter Description
North side of Bldg# 421 (Club) off Dorm parking lot in a green electrical cabinet. Contains 3 meters, one is for Bldg# 422 (Chapel) and one is for Bldg# 421 (club) and one is designated as a spare	3 Phase, Kilowatt Hour
Bldg# 510 (Air Force Radar Site)	3 Phase, Kilowatt Hour

J1.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J1.6 below.

TABLE 6
New Secondary Meters
Electric Distribution System BANGOR IAP (ANG)

Meter Location	Meter Description
Bldg# 420 (Commissary)	3 Phase, Kilowatt Hour
Bldg# 425 (AAFES)	3 Phase, Kilowatt Hour

J1.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to the person identified at time of contract award.

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the person identified at time of contract award.

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to the person identified at time of contract award.

4. System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to the person identified at time of contract award.

J1.7 Energy Saving Projects

IAW Paragraph C.3, Requirement, the following projects have been implemented on the distribution system by the Government for energy conservation purposes.

None

J1.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the BANGOR IAP (ANG) boundaries.

J1.9 Off-Installation Sites

No off-installation sites are included in the sale of the BANGOR IAP (ANG) electric distribution system.

J1.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

TABLE 7
Service Connections and Disconnections
Electric Distribution System BANGOR IAP (ANG) None

Location	Description
None	

J1.11 Government Recognized System Deficiencies

Table 8 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the BANGOR IAP (ANG) electric distribution system. If the system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

TABLE 8
System Deficiencies
Electric Distribution System BANGOR IAP (ANG)

Project Location	Project Description
None	